

Remarks

Applicants respectfully submit claims 1-4, 8, 9, 11-14, 17, 18 and 20-22 are patentable over Lee and Fillion under 35 U.S.C. 102(e). For a claim to be anticipated (e.g., for 102(e) to apply) "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). However, using more than one reference for a 102 rejection has been held proper in three circumstances. (MPEP 2131.01) Of the three situations, only one of them is possible based on the rejection herein: to explain the meaning of a term used in the primary reference. Therefore, the Examiner must be using Fillion to explain the meaning of "substrate" used in Lee under this 102(e) rejection.

As a first point, the use of Fillion to explain the meaning of the phrase "substrate" in Lee is unnecessary or improper. When read as a whole (as required by MPEP 2141.02 under "Prior Art Must Be Considered In Its Entirety Including Disclosures That Teach Away From The Claims"), all of the substrates discussed in Lee, particularly substrate 806, is a semiconductor substrate. As described in the background section of Lee, Lee is trying to solve the problem of incompatibility and processing complexity of forming programmable device on the same semiconductor substrate as conventional logic elements, for example, using conventional processing. (See column 1, line 53 – column 2, lines 15.) Lee defines conventional processing as being formed on wafers. (Column 4, lines 26-36.) Wafers are known to be semiconductor materials or substrates. Lee's solution involves forming programmable devices on one semiconductor substrate, forming other devices, such as logic devices, on another semiconductor substrate and joining them together. (See column 5, lines 1-4 and column 11, lines 52-54.)

Lee describes in FIG. 7 that substrate 705 is a semiconductor substrate. FIGS. 8A and 8B, which include element 806, are "different embodiments for providing bonding pad connections" than that shown in FIG. 7. (Column 12, lines 1-3.) By inference, the substrates in FIGS. 8A and 8B are therefore the same materials as that described in FIG. 7 and thus the substrate 806 is a semiconductor substrate. This is further supported by the fact that Lee states, "Programmable element 813 can be any of the programmable elements previously described." (Column 12, lines 11-12.) The programmable elements are previously described with regard to FIG. 7 in column 11, lines 19-20. In order for the programmable element 813 to be any programmable element previously described the substrate 806 must be any substrate previously described and hence, is a semiconductor substrate.

Furthermore, Lee only describes that the substrates are semiconductor substrates, not packaging material substrates. In addition, Lee teaches away from the substrates being a packaging material substrates, because Lee teaches that FIG. 2B is an unpackaged integrated

circuit and all subsequent processing of FIG. 2B fails to teach or suggest forming packaging processes and using a packaging material substrate.

While Applicants agree that the broad term "substrate" taken alone could be a semiconductor substrate, a packaging material substrate, or another type of substrate, all references in Lee are to a semiconductor substrate. Just because Lee fails to repeat the entire phrase "semiconductor substrate" and instead sometimes uses the shorthand "substrate" does not mean that Lee teaches that the substrate can be any substrate, such as a packaging material. Lee needs to be taken as whole and for at least the above reasons when viewed as a whole every substrate in Lee is a semiconductor substrate. It is improper for the Examiner to pick and choose from the prior art.

The Examiner relies on Fillion to show that Lee's substrate can be a packaging material. However, for reasons discussed above, Lee's substrate is a semiconductor substrate. A packaging material substrate is not a subclass of semiconductor substrate because packaging materials (e.g., molds) are not semiconductors (e.g., silicon). Thus, Lee properly defines what substrate is being discussed therein and thus the use of Fillion to explain the meaning of "substrate" is unnecessary. Furthermore, the Examiner is improperly using Lee to expand and not to explain Lee's substrate. Using a second reference to expand the meaning of a word in a first reference is an improper use of a second reference under a 102 rejection. (See MPEP 2173.05.) In other words, the Examiner is suggesting Lee's substrate be replaced with Fillion's substrate, which would be a 103 rejection not a 102 rejection. For these reasons, the rejection is incorrect legally or technically. Therefore, the rejection should be withdrawn.

Secondly, even if the Examiner could replace Lee's substrate with Fillion's substrate under a 102 rejection (which again is improper), such a combination would destroy the functionality of Lee. Lee's substrate cannot be replaced with Fillion's packaging material substrate because it would destroy the functionality of Lee because Lee requires the substrate 806 to be a semiconductor substrate capable of having a programmable element formed within it using conventional semiconductor processes (See Column 1, lines 53-67 and Column 2, lines 29-60.) A packaging material, such as a mold, cannot be used as a substrate to form a programmable element using conventional semiconductor processing.

Applicants submit claims 5-7, 15 and 16 are patentable over Lee under 35 U.S.C. 103(a). As a first point, Lee fails to teach or suggest a substrate that is a mold compound for the reasons outlined above. Secondly, even if the Examiner rejected claims 5-7, 15 and 16 over Lee in view of Fillion, the combination would also fail to teach or suggest a substrate that is a mold compound because the combination of Lee and Fillion destroys the functionality of Lee as described above. Therefore, for at least these reasons, claims 5-7, 15 and 16 are patentable over Lee under 35 U.S.C. 103(a).

In addition, the Examiner cites, "it would have been within the level of ordinary skill in the art to use metal nitride instead of metal oxide [for the fuse] because of its superior adhesive properties" and refers to column 5, lines 43-44 of Lee for support. In column 5, lines 43-44 of Lee fails to mention metal nitride or provide support that a superior adhesive property is desirable for a fuse. Therefore, claim 7 is patentable over Lee for yet another reason.

Believing to have responded to every issue raised by the Examiner in the last communication mailed, Applicants believe the present Application is currently in a condition of allowance. Applicants earnestly solicit allowance of all pending claims. Please contact Applicant's practitioner listed below if there are any issues.

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